·	Approved For IX	elease 2003/12/22 : CIA-RDP78E		25
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	MEMORANDUM FOR: DI	rector, Strategic Technolog	ry, ARPA	
<b>(</b> 1	ATTENTION :			,
	SUBJECT : EV	raluation of Method Used to of Soviet SS-9 Silos	Estimate the Orientation	
	the ACIC Method Use is forwarded for you 2. This evalu Strategic Research of photogrammetrists for	ation was undertaken at the of the Directorate for Inte rom NPIC's Technical Service	request of the Director, Elligence, CIA. Analytical es and Support Group con-	
	CONTROL WATER INCIDENT	d have critically reviewed	CHOIL SCHOOL HE HELDE	
	addition, there was	ry of ACIC's primary and au agreement with evaluation es taken to control the err	wiliary methods. In of potential error sources	25
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22 September 1969

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MEMORANDUM FOR:

Executive Director, National

Photographic Intelligence Center

SUBJECT

Evaluation of Method Used to

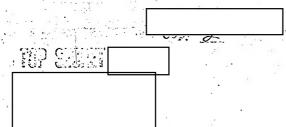
Estimate the Orientation of

Soviet SS-9 Silos

The results of studies on SS-9 launch site orientations undertaken by

on behalf of the Advanced Research Projects Agency (ARPA) of the DDR&E may provide insights into Soviet strategic targeting concepts and plans. These results are based on a complex methodology involving the use of satellite photography to derive the orientation of SS-9 silo doors. Together with intelligence on site orientations and launch azimuths used at the Soviet ICBM test range, this measurement is believed to provide an indication of the preferred launch azimuth, and thus a means of limiting the number of possible targets to those which lie along the resultant theoretical flight path of the missile.

- 2. While promising, the method is highly dependent on the accuracy of the angular measurement of the silo door. I am informed that an error of one degree in this measurement could mean a divergence of 60 miles or more from the intended Soviet target at ICBM range. The measurements for the study were made by the Aeronautical Chart and Information Center (ACIC) in St. Louis, Mo.
- 3. I would like to be in a position to judge the overall validity of the study, but to do so I need an evaluation by the National Photographic Intelligence Center of the method used by ACIC to estimate the site orientations and an objective assessment of the significance that can be attached to the results. I am requesting, therefore, that



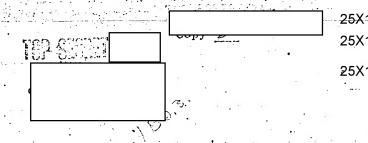
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·	you undertake this evaluation. For guidance, I have attached a list of specific questions I would like to have considered.	
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25X1	this matter with of your starr, These generemen arso	25)
- 2	have consulted with Director of ARPA's Strategic Technology Office and	25) 25)
25X1	who monitors the project. expressed their desire to cooperate	25)
25X1	with us and their willingness to make both personnel and materials available to NPIC in carrying out the evaluation of the study results.	
	5. I would like to move ahead on this as soon as possible and would appreciate your giving this request your early attention.	
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	Strategic Research	
4	Attachment:	- ·
	ACIC Azimuth Study,	25)
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	2003/12/22:E CIA-RDP78B05703A	
REQUEST FOR MPIC SUPPORT	READ INSTRUCTIONS ON RI	EVERSE BEFORE COMPLETING FORM
REQUESTING AGENCY	3. DATE PREPARED	4. DATE REQUIRED
5X1 <sub>pir/OSR/CIA</sub>	25 September 1969	1 November 1969
DEFICE	6. PHONE NO.	7. REQUESTER'S CONTROL NO.
5X1TSSG/RED/RSB	Land Market	NPIC/TSSG/RED/RSB-16/69 25X
REQUESTING OFFICER	9. SUGGESTED JOB TITLE Evaluation of Azimu	
	11. COUNTRY CODE	this of 35° biros
BE NO.		
DESCRIPTION OF REQUIREMENT AND BACKGROU	ND INFORMATION	
The attached memorandum provid site orientations undertaken by Advanced Research Projects Agency (made by the Aeronautical Chart and NPIC is requested to provide a estimate site orientations and an ocan be attached to the results. The	ARPA). The measurements to Information Center (ACIC).  n evaluation of the method biective assessment of the	used by ACIC to significance that
questions to be considered.		
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	og Sehr	
	21 37	
SPECIFIC REQUIREMENT		
1. Evaluate math model and deriva-	tions.	
2. Error analysis of measurements	and or solutions.	
3. Validation of ACIC error analy	sis.	
4. Prepare a report of total eval	uation to requesting Agency	•
The support of Chiapspiress will b	e required. It is expected	that
approximately 90 man-hours will be	required to complete this	task.
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